

**Abstract**

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**Method and device for the detection of substances in vital tissue**

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The invention relates to a method and device for the detection, in particular for determining the concentration, of substances in vital tissue. The object of the invention is to create a method and device for the detection of substances in  
10 vital tissue, this permitting the reliable qualitative and quantitative detection of such substances in a physiologically safe manner. The object of the invention is achieved by a method for the detection of substances in vital tissue in which light of a predetermined wavelength is directed onto the tissue in such a manner that the light penetrates into the tissue; at least some of the light escaping from  
15 the tissue is captured and the reflected light is analyzed with an association being made between its wavelength and intensity; and the thus determined properties of the reflected light are compared with at least one reference system, the presence and/or concentration of a substance being deduced on the basis of a correlation with the reference system.

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Fig. 1